



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

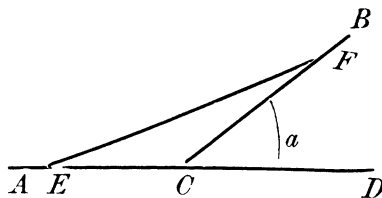
EASY COROLLARIES IN NON-EUCLIDEAN GEOMETRY.

By **GEORGE BRUCE HALSTED**, A. M. (Princeton), Ph.D. (Johns Hopkins). Member of the London Mathematical Society, and Professor of Mathematics in the University of Texas, Austin, Texas.

In that sort of Non-Euclidean geometry usually named after Lobatschewsky, it is readily demonstrated that the angle-sum of a rectilineal triangle is a variable directly connected with the size of the triangle, just as is the case in spherics. This proof in a very elementary form is given by John Bolyai. His section 41 is, "Equivalent triangles have their angle-sums equal." Then as an easy corollary, section 42, "Triangles are to each other as the supplements of their angle-sums."

From this we get, at once, the corollary, that in Lobatschewsky's geometry there may be a triangle whose angle-sum differs from a straight angle by less than any given finite angle however small.

For a single angle ACB can always be drawn less than a straight angle and in such manner as that it shall differ from a straight angle by as small an angle, a , as any given finite angle however small. Then drawing a straight line from any point E on the arm AC to any point F on the arm BC we shall have a triangle ECF , the supplement of whose angle-sum is less than a .



Hence the further corollary, that we can always draw a triangle less in size than any triangle whose angle-sum is less than a straight angle by the given finite angle a .

BIBLIOGRAPHY OF THE HISTORY OF GEOMETRY; ALSO A LIST OF MATHEMATICAL PERIODICALS.

By **ROBERT J. ALEY**, A. M., Professor of Mathematics in the Indiana University, Bloomington, Indiana.

The following list was prepared in the belief that it would be of interest and value to those who are making a study of the history and development of Geometry. The list does not pretend to be complete, yet it is thought that the principal English, French, and German works are included. The list of American Periodicals is thought to be complete. The date given in connection with each periodical is the date of first issue. In the case of periodicals that have been discontinued, the date of discontinuation, when possible, is given. The list has been made by a careful study of the references in the leading histories of Mathematics. The place of publication of a number of the periodicals has not been determined with certainty; these are left blank in the list. Corrections and additions will be gladly received by the writer.